NEW PUBLICATIONS.

OLE BULL.

OLE BULL. A Memoir. By SARA C. BULL. 8vo. pp. iv., 417. Houghton, Mifflin & Co.

This simple, straightforward, sensible and sympathetic biography of the famous violinist, from the pen of his widow, is what such a domestic memorial ought to be—a sketch of the personal history of the man, rather than an attempt to analyze the qualities of his art or to define his place in the history of music. Although it is entirely free from any deliberate effort at character-painting, it affords us an attractive picture of one who had a remarkable gift of winning admiration and affection, and who numbered among his friends scores of the illustrious whose regard is justly looked upon as a stamp of nobility. Posterity will not place Ole Bull among the great masters; but there was a strong and deeply interesting individuality in his art, and he possessed, moreover, a certain individual charm which reminds us of the fascination exercised by Mendelssohn and Mozart. Mrs. Bull's memoir dispels some of the fictions which have been current in all the published biographies of the violinist. It is not true that he killed a fellow-student in a duel. It is not true that, despairing and destitute in Paris, he threw himself into the Seine and was fished out to be befriended by a rich lady, who saw in him a resemblance to her dead son. Perhaps it will be thought that the Ole Bull legend has been embroidered with some new marvels to compensate for the banished illusions. We find it difficult to believe, as firmly as the artist apparently did, in the poisoning of his tea by an American debtor, or the diabolical attempt of a young Jesuit to hug him to death, or the large collection of bowie knives presented to him by admiring ruffians whom he had thrashed when they tried to kill him, or the mysterious adventure with Vidocq, who saved him from starvation by revealing the color destined to win at a certain hour on a certain gaming table. But it must be confessed that these stories add to the vivacity of the narrative, and they are not impossible.

The style of Ole Bull was the natural product of an eccentric disposition and a highly irregular education. His temperament was impulsive and at the same time dreamy. He was peppery and excessively amiable, earnest and very changeable, ardent and not a little sentimental. He had the face, the smile, the bearing and the manners of a kindly and courtly gentleman, and among people of general culture and refinement he found his most fervid friends; but this memoir abounds with anecdotes of his rugged, not to say rude independence, and it was with some reason that Jules Janin called him "my savage." With some reason; and yet no better picture of him was ever painted than Longfellow's famous sketch in the "Tales of the Wayside Inn":

> Last the Musician, as he stood
> Illumined by that fire of wood;
> Fair-haired, blue-eyed, his aspect blithe,
> His figure tall and straight and lithe,
> And every feature of his face
> Revealing his Norwegian race;
> A radiance, streaming from within,
> Around his eyes and forehead beamed;
> The angel with the violin,
> Painted by Raphael, he seemed.

This nature compounded of contradictions never had a systematic training. At five years of age the child was teaching himself to play the violin, and although he had some instruction at intervals afterward by professional but undistinguished performers, he was really his own master. His peculiar method of holding the instrument resulted from the fact that as a boy he could not or would not learn the standard technique. He was an early admirer of Paganini's compositions, and later he was noted for his love of Mozart; but it does not appear that any of the great composers deeply influenced the development of his talent, or that any of the famous violinists had much share in the formation of his style. He visited Spohr, but was disappointed in him and was coldly received. Mrs. Bull omits to mention that Spohr, on his part, records in his autobiography an unfavorable opinion of Ole Bull. Indeed, the old man and the young man were little calculated to understand each other. It was in the wild and majestic natural scenery of Norway, the myths, ballads, folk tales and popular melodies which haunt the valleys and fjords of that romantic land, that Ole Bull sought his inspiration. "All these things," said he, "have made my music." When the King of Denmark asked him who taught him to play, he answered, "The mountains of Norway"; and we cannot properly value his playing unless we consider it in connection with popular and national feeling, and disregard its relation to pure classical art. How he acquired what he knew of harmony shall be told in the surprising language of the biographer:

> When restrained by his tutor from playing, Ole resorted to whistling and singing, and he soon found that he could do both at the same time. In this way he studied the laws of harmony. Ere long he was able to whistle and sing and accompany himself on two strings, and later he succeeded in playing on all four strings at once. These studies enabled him at length to combine six different themes at the same time, a sort of fugue study which he always enjoyed.

At fifteen or sixteen he thrashed his tutor. At eighteen he went to the University of Christiania to study for the church, but he spent most of his time in music, and failed in his examination. Then followed a time of hardship in Paris, but he got a hearing at last, and became a celebrity. An adventure into Italy led him to a close study of the Italian style of singing, in which he believed that he saw the key to the hidden capacities of the violin, and now first the cultivation of his powers took a definite direction. "From this ardent study, assisted by eminent teachers of Italian song, came his command of melody, which enabled him to reproduce with their true native character the most delicate and varied modifications of foreign music that he met with—Italian, Spanish, Irish, Arabian, Hungarian, as well as the National songs of his own country. But the chief result of these studies was that he found himself; he learned to know the nature and limits of his own talent, and was able to give form to his musical feelings." Having determined what he wanted to do, the next thing was to perfect his technique with special reference to that object. By the time he was ready to enter upon his true career, both his style and his execution were original. It was in Bologna that he first made a genuine sensation, and the person who discovered him was the prima donna Coibran, the wife of Rossini. She heard his violin as she passed the open window of his lodgings, and upon the strength of her report the unknown young artist was called out of bed the same night and hurried to the theatre to replace Malibran in a Philharmonic concert. It was a cold, critical, disappointed and aristocratic audience, but he threw the house into intense excitement, and his fortune was made. From that evening fame went before him all over the civilized world. At a concert in the palace of the Duke of Lucca he refused to play until the Queen Dowager of Naples had been requested to stop talking. The next day the Queen sent for him, and opened the interview by remarking that she supposed there were many bears in Norway, to which Ole Bull replied, that he himself had the good fortune to be nursed by one. He spiced the conversation with some further uncivil remarks, but the Queen showed a kindly interest in him, and rendered him real services. He was only twenty-four at this time. A few years later, in the royal palace at Stockholm, he took offence at a hasty expression of the King (Bernadotte) about the Norwegians, and warmly controverted it. "Your remark, sir, is out of place," said the King. "If my remark is out of place, your Majesty, I myself am out of place, and will take my leave." "Remain, sir," replied Bernadotte, with a commanding gesture. "No sire; I will see if a Norseman is free in the palace of the King of Sweden," and the artist bowed and moved toward the door; but the King, being much the more dignified and courteous of the two, retained him by adding, with a smile: "I pray, you, sir, to remain; it is the duty of a Prince to hear the opinions of all his people."

The narrative of Ole Bull's concert tours is given with sufficient fulness, and interspersed with interesting anecdotes, as well as with pleasant glimpses of his musical associations. Chopin was one of his first friends in Paris. Malibran, De Beriot, Ernst, Thalberg, appear in cordial intercourse with him, Paganini treated him with marked consideration, and predicted a great future for him long before his powers were developed. Liszt, who of all artists appears to have been most richly endowed with a genius for friendship, figures as his comrade and correspondent. His intimacies in the United States were largely with the literary class, and at Cambridge especially his was a familiar and beloved presence. His first visit to America, in 1843-'45, was attended with all the phenomena of a popular furore. Vieuxtemps and Artot were here at the same time, but they were speedily eclipsed by their more sensational rival. America had few standards of comparison at that day in musical matters; hardly any artists of the first rank had then ventured across the Atlantic; and it was inevitable that the startling and intensely emotional performances of Ole Bull should be preferred to the pure and beautiful art of the most refined classical school. The frantic enthusiasm of the multitude was matched by the rhapsodies of essayists and letter-writers. When Ole Bull came a second time, in 1852, he received a cordial but much more rational welcome. The American public learns fast, and its applause was much better worth having, now that it was bestowed with some discrimination. Of the criticisms belonging to these first and second American tours, quoted in the memoir, that contributed by Mr. George William Curtis to THE TRIBUNE is remarkably perspicuous, just and comprehensive; indeed, it is the only one of the specimens here preserved which stands the test of the ripe judgment of thirty years later; and yet it certainly is not lacking in fervor. In his more recent tours the violinist showed much less passion and excitability than in his youth, and stirring scenes, such as were witnessed in his first visit, were rare. The mood in which he oftenest presented himself was one of sentimental and wandering revery, and although his power of execution and his incomparable beauty of tone were as marvellous as ever, the prevailing spirit of his music was gentle and soothing. This is only what was to be expected, when we bear in mind what has been said of the source of his inspiration, and it was quite in keeping with the modification of his tastes that as he grew older the love for his Norwegian home became more and more a tender and absorbing passion. Joseph Joachim is credited with the remark that "faults in Ole Bull's playing are more noticeable as he advances in age, but no artist in our time has possessed Ole Bull's poetic power; no one has ever surpassed his playing of the adagio. I think all his cultivated auditors will say the same." This is high praise from a high authority. But the rank which it assigns to the violinist is by no means the highest. Ole Bull's creative power was slight. His compositions have little intrinsic value, and on the occasions—fortunately not too frequent—when he essayed the interpretation of great classical master-works, he showed neither intellectual grasp nor even very ardent feeling. At such times he rose to the level of the music before him only in fragmentary passages, and of course he failed to lift up his audience. The really great artist is inspired by great themes; Ole Bull was only inspired by romantic ones.

LECTURES ON ART. Delivered in Support of the Society for the Protection of Ancient Buildings. 8vo pp. London: Macmillan & Co.

This neat volume contains five lectures by R. S. Poole, Professor W. B. Richmond, E. J. Poynter, R. A., J. T. Micklethwaite and William Morris. Only one of them treats distinctly upon the matter of preserving ancient buildings, and that, the first, by Mr. Poole, upon the "Egyptian Tomb and the Future State." This discourse is a swift and popular presentation of some of the Egyptian beliefs and practices, and brings out divers facts as to the making of mummies and building of tombs, of which last the great Pyramids are the most striking. He shows that the priesthoods encouraged the belief in a future life, and made money out of that belief. He distinctly asserts that Piazzi Smith's ingenious theory as to the meaning and purpose of the Great Pyramid of Cheops is exploded; and that it was a tomb, and was intended for the glorification of a king. He laments the destruction and robbing of the Egyptian Tombs which has been widespread and insatiable, and charges his own people and nation with having been foremost in robbing them in the past and in the present.

Professor Richmond's lecture is entitled, "Monumental Painting," but in fact is a discourse upon the three arts of sculpture, painting and architecture, and does much to show their interdependence. Almost, as matter of course, he praises highly the work of the fifteenth century artists, and calls attention to samples of work done by men like Giotto, Brunelischi, Mantegna, Michael Angelo, etc.

Mr. Poynter treats of "Ancient Decorative Art" in the tone of fulsome praise now so much the fashion. He confesses that there can be nothing new to say, but he must say something, and he goes over the old straw and brings up again the Greek vase, with the customary phrases "splendor of composition," "precision of outline," "exquisite perception" etc., etc. Among some good and wise things he puts upon us some bad things, and surprising things, such as this: "I give you as an illustration of style a single figure from a vase, but any other would illustrate just as well the purity of outline and the completeness of composition which is to be found in all the designs on the Greek vases of the archaic and best, and even of the later periods." Note the word *all*, and then note that on the next page he says, "Mr. Birch conjectures the same fact that the composition on these vases is frequently better than the drawing." So far from being perfect, those who have made any study of the Greek vase know that a large number of them are lamentably deficient both in drawing as well as in composition. But right or wrong, Mr. Poynter's lecture is at least readable.

Mr. Micklethwaite treats of the "English Parish Churches" in an intelligent and interesting way, for he knows whereof he writes. Among the interesting facts presented he mentions the early English parish church as having been formed after the pattern of the Roman Basilica, and states that at Brixworth to-day can be seen the greater part of such a church, built by the followers of St. Augustine about 680. He calls attention to the fact that later, when towers were added, they were built, "not by borrowing money and paying it off by degrees . . but by building slowly as they collected funds to do it with."

If those people were no better Christians than we, they were better business men. He urges in various ways the preservation of all early buildings, and properly despises and contemns the gaudy "restorations" latterly in vogue all over England.

The two last lectures, by William Morris, upon "Pattern Designing" and "The Lesser Arts of Life," will be most read because of the fame and work of the man. While they are far from perfect as lectures, they contain much that the reader will wish to know, because they tell of all things which Mr. Morris himself knows—not from a book, but from his work and experience. He says concerning St. Peter's at Rome:

> "That new Church of St. Peter, which still curses the mightiest city of the world—the very type it seems to me of pride and tyranny, of all that crushes out the love of art in simple people, and makes art a toy of little estimation for the idle hours of the rich and cultivated."

While these lectures cannot be classed among the most valuable, they contain much which the students will wish to know.

AN ILLUSTRATED DICTIONARY OF WORDS USED IN ART AND ARCHÆOLOGY. By J. W. MOLLET. 4to. pp. Houghton, Mifflin & Co.

This handsome volume has been prepared with care by a member of the Board of Public Instruction of Paris. It is and professes to be a compilation and condensation of several large and expensive books: among which are Dr. Smith's and Mr. Rich's Dictionaries of Greek and Roman Antiquities, Meyrick's Ancient Armour, Planché and Fairholt's Costumes, Jacquemart's Pottery, Boutelle and Pallissier's Heraldries, etc., etc. Needle-work, Laces, Music, Painters' and Goldsmiths' work are also well represented.

Probably almost 10,000 terms are quoted and explained in the book. Of course, the explanations and definitions must be short, but nearly all are clear and comprehensive. Many terms and words are given which are out of use or are almost never used; still those most in use are also given in great number.

The peculiar value of the book is in the illustrations, which are many—sometimes there are five on a single page; these are well done and are indispensable. The reader can see that no words can express the share of a *Cylix* or the purposes of a *Tabard* as one of these illustrations does. It is, in short, a valuable hand-book.

BOOKS OF THE WEEK.

PIONEERS OF THE WESTERN RESERVE. By Harvey Rice. 8vo, pp. 350. (Charles T. Dillingham.)

BULLET AND SHELL. War as the Soldier Saw It. By George F. Williams. Illustrated by Edwin Forbes. Large 8vo, pp. 454. (Fords, Howard & Hulbert.)

THE REVIVAL AND AFTER THE REVIVAL. By J. H. Vincent. 12mo, pp. 74. (Phillips & Hunt.)

ELFRIDA. A drama. By Dyson Rishell. 16mo, pp. 146. (Philadelphia: J. B. Lippincott & Co.)

LATIN GRAMMAR. For use in schools and colleges. By Thomas Chase, LL. D. 12mo, pp. 313. (Philadelphia: Eldredge & Brother.)

THE CHURCH LYCEUM; Its Organization and Management. By Rev. T. B. Neely, A. M. 12mo, pp. 216. (Phillips & Hunt.)

GESTA CHRISTI; or, A History of Human Progress under Christianity. By Charles Loring Brace. Large 8vo, pp. 496. (A. C. Armstrong & Son.)

HOW WE OUGHT TO LIVE. By Joseph F. Edwards, A. M., M. D. Large 8vo, pp. 636. (Philadelphia: H. C. Watts & Co.)

BIBLE MYTHS, and their Parallels in Other Religions. Large 8vo, pp. 568. (J. W. Bouton.)

BOSTON ON MODERN LITERATURE.

From The Boston Transcript.

The return of *The Atlantic* to its first literary loves is the startling confession of a fact which good observers have for some time noticed. We have just lived through a generation of creative literature, and the men who made the generation illustrious by their originality have either passed away or are standing "one inch from life's safe hem." It needs no reflection that, if an equally strong series of writers were pressing into the vacated places, the editors of *The Atlantic* would have contented themselves with new talent in the natural sequence of things. But their action is a virtual proclamation of the intellectual dearth which just now marks New-England authorship. We have developed a generation of critics, and criticism has superseded creation. A chief employment of our newer writers has been to talk about the greater men who went before them. The process is a natural one and has occurred in the literary history of other countries. Germany rested luxuriously for a long time upon the laurels won in the Goethe-Schiller era; and her scholars are still analyzing the great dramas and fictions of these two creative minds, instead of producing new work. There is, to be sure, a new series of German novelists and poets, but they compare with the earlier giants as water with wine. It seems as if we, in New-England, were repeating this old story of the blossom, fruitage and decline of authorship. Nor need we confine the statement to New-England, for we may look with strained vision over the whole field of American talent for a single powerful novelist, essayist or poet, unless, perhaps, we except the coarse, democratic genius of Whitman. We are doing much in the finesse of criticism and surface description; we are holding arguments and amassing statistics; but we are not producing serious original work. One of the largest literary activities of our day is the itinerant type—books of travel and comment; but this, too, is a sort of reportorial profession.

It is worth while to look for some of the probable causes for this changed quality of our literature. How comes it that we see no men likely to become the spiritual and artistic successors of Irving, Bryant, Hawthorne, Emerson and Longfellow? Howells and Henry James, jr., are the two strongest writers to whom we can point among younger men. We are thankful for these, and hedge them about with discreet praise, lest they, too, may fail us. But the great number of novelists, poets and essayists who must feed such magazines as *The Century* and *The Atlantic* are a weak fraternity. Thus, very naturally, the magazines are stretching their hands toward England or reaching back into our own past. If any principle of protection could be applied here, it is certainly to be prayed for. But our literary talent of good class is so well paid that no reason can be found here.

One undoubted cause of the dearth is the prevailing restlessness and lack of seriousness in the present American nature. Let one read the sweet, thoughtful measures of Longfellow's posthumous poem, "Michael Angelo," and he will at once see that the fine penetration which makes such a poem a possibility can only be the evolution of at least two or three generations of deep-natured and earnest ancestry. Bret Harte, Walt Whitman and Joaquin Miller are better exponents of our contemporary spirit than the genial and fine-grained men who have either vanished or are fast vanishing. Whittier speaks to us now only in the infrequent intervals of infirmity, but his song has lost none of its simple power. There is no sign of decrepitude in Holmes's new paper, and we are rejoiced to find in it the old neighborliness which his didactic wit never obscures. There is not one of our new writers who speaks to us with this old glow of affection. We feel like clinging to the hands that have ministered to us so long; and a certain sense of spiritual orphanage falls upon us in thinking back upon the tenderness as well as the intellectual insight of these men of the past. The new writers do not stand in the same relation to us; and it is questionable whether that almost brotherly interest which men like Emerson and Longfellow cherished toward their fellows can reappear in a generation so immersed in sensationalism as ours. It takes much more than information, ambition and mental activity to constitute a great writer.

Moreover, our political life of the past twenty years has not favored mental repose. The civil war created and left for us a legacy of hot emotions, which are but just dying away. Social and economical problems have acquired complexity and have absorbed energy. We are still in the turmoil of these large, immediate questions; and art and literature can scarcely flourish in a soil which is being continually ploughed by antagonisms or debates. Just now sociological matters bid fair to make a large demand upon our best minds for a good while to come. But we can hardly make full excuse for ourselves in this way; since English nationality has developed in a corresponding turmoil, and yet has given life to the rich and deep temperament of Tennyson, Browning and George Eliot, in the very heat of such upheavals. After all we can only say that we have somehow missed the golden conditions which give life to great literary art; and it is doubtful if any studied observance of conditions will give us what we have missed. One thing is plain, however; that earnestness of life and a fine moral rectitude are ingredients of a worthy literature. The immense increase of American literature is but a sorry compensation for its lowered quality. There are those who doubt if the materials for a great poem or romance can be found in the United States. Drama and fiction, it is said, express the tragedy and suffering of humanity, and the study of modern civilization is to obliterate suffering. There is truth in this; but without being pessimists we can see that some struggle and suffering is inevitable. Moreover the drama of personal development always offers during material to the artist of human nature. It is not believable that a dearth of material can explain the dearth of writers. It is more creditable that the spread of the scientific spirit which brings all the phenomena of life within the reign of law may have indisposed the stronger intellects to poetize human experience. That such poetization is compatible with keen psychologic analysis we have demonstration in Thackeray and George Eliot. But whatever the causes of this lowered quality of American authorship, it is impossible not to feel a regret at the undoubted fact.

HENRY JAMES'S NEW HEROINE.

From "The Siege of London," in The Cornhill.

"Headway—Headway? Where the deuce did she get that name?" Littlemore asked, as they looked down into the animated dusk.

"From her husband, I suppose," Waterville suggested.

"From her husband? From which? The last was named Beck."

"How many has she had?" Waterville inquired, anxious to hear how it was that Mrs. Headway was not respectable.

"I haven't the least idea. But it wouldn't be difficult to find out, as I believe they are all living. She was Mrs. Beck—Nancy Beck—when I knew her."

"Nancy Beck!" cried Waterville, aghast. He was thinking of her delicate profile, like that of a pretty Roman empress. There was a great deal to be explained.

Littlemore explained it in a few words before they returned to their places, admitting, indeed, that he was not yet able to elucidate her present situation. She was a memory of his Western days; he had seen her last some six years before. He had known her very well and in several places; the circle of her activity was chiefly the Southwest. This activity was of a vague character, except in the sense that it was exclusively social. She was supposed to have a husband, one Philadelphus Beck, the editor of a Democratic newspaper, *The Dakotah Sentinel*; but Littlemore had never seen him—the pair were living apart—and it was the impression at San Diego that matrimony, for Mr. and Mrs. Beck, was about played out. He remembered now to have heard afterward that she was getting a divorce. She got divorces very easily, she was so taking in court. She had got one or two before from a man whose name he had forgotten, and there was a legend that even these were not the first. She was exceedingly divorced! When he first met her in California, she called herself Mrs. Grenville, which he had been given to understand was not an appellation acquired by matrimony, but her parental name, resumed after the dissolution of an unfortunate union. She had had these episodes—her unions were all unfortunate—and had borne half a dozen names. She was a charming woman, especially for New-Mexico; but she had been divorced too often—it was a tax on one's credulity; she must have repudiated more husbands than she had married.

At San Diego she was staying with her sister, whose actual spouse (she, too, had been divorced), the principal man of the place, kept a bank (with the aid of a six-shooter), and who had never suffered Nancy to want for a home during her unattached periods. Nancy had begun very young; she must be about thirty-seven to-day. That was all he meant by her not being respectable. The chronology was rather mixed; her sister at least had once told him that there was one winter when she didn't know herself who was Nancy's husband. She had gone in mainly for editors—she esteemed the journalistic profession. They must all have been dreadful ruffians, for her own amiability was manifest. It was well-known that whatever she had done she had done in self-defence. In fact, she had done things; that was the main point now! She was very pretty, good-natured and clever, and quite the best company in those parts. She was a genuine product of the far West—a flower of the Pacific slope; ignorant, audacious, crude, but full of pluck and spirit, of natural intelligence and of a certain intermittent, haphazard good taste. She used to say that she only wanted a chance—apparently she had found one now. At one time, without her, he didn't see how he could have put up with the life. He had started a cattle-ranch, to which San Diego was the nearest town, and he used to ride over to see her. Sometimes he stayed there for a week; then he went to see her every evening. It was horribly hot; they used to sit on the back piazza. She was always as attractive, and very nearly as well-dressed, as they had just beheld her. As far as appearance went, she might have been transplanted at an hour's notice from that dusty old settlement to the city by the Seine.

"Some of those Western women are wonderful," Littlemore said. "Like her, they only want a chance."

MEDICAL AND SURGICAL NOTES.

BORACIC ACID AN UNSAFE ANTISEPTIC.—The London journals publish an interesting communication by Mr. Gade, a well-known medical authority, criticising the use of certain chemical substances at the present day for preserving articles of diet—substances which, however small the quantity employed in order to insure the preservative effect, must, in the long run, enter considerably into the animal economy, and thus, in a longer or shorter interval, impairing the health. In this class, according to the communication in question, boracic acid is to be included. It appears that while residing in Sweden, Mr. Gade used boracic acid for preserving the milk supplied to his household from decomposition: for some time no ill effects were noticed, but after using the milk for a short time two of his young children fell ill—they became languid and drowsy, and their appetite failed. This was at first attributed to the hot weather, during which the boracic acid had preserved the milk quite sweet and pure; but it was soon traced to this article of diet, and the physician who was called in to the cases pronounced that to be the cause,—the boracic acid acting, he said, as an anodyne.

FILTERING MEDIUMS.—The peculiar action of silicated carbon as a filtering medium has been thoroughly investigated of late by Professor Wanklyn and other experts in sanitary and chemical science, the one broad fact arrived at being that silicated carbon possesses, in a high degree, the property of decomposing nitrogenous and organic matters,—and this, though they be contained in very dilute or comparatively strong solutions. Water containing nitrogenous matter, animal secretions and excreta, as milk and urine, greatly diluted with solutions of quinine, morphia and strychnine, have been, among other liquids, passed through this filtering material, and with striking results. In the case of the quinine and strychnine experiments, eight and one-fourth and eight and three-fourths grains respectively of these intensely bitter alkaloids were dissolved, each in one gallon of water, and after filtration of the solution, they were found to be devoid of bitterness; this is considered a striking proof of the thorough decomposing or eliminating action of the material.

ACTION OF GLASS ON LIQUIDS.—An article in a German paper, on the effect of the color of bottles on liquids, makes the statement that liquors contained in colorless bottles, when exposed for some time to the light, acquire a disagreeable taste, notwithstanding the fact that they may have been of superior quality before being so treated; liquors contained in brown or green bottles, however, remain unchanged in quality, even if exposed to direct sunlight. This phenomenon has not received due attention heretofore,—the point of quality, in fact, being so generally sacrificed or subordinated to outward appearance. Since, therefore, the results of the above treatment arise from the chemical action of light, it is recommended to use red, orange, green or opaque bottles for the preservation of liquors, while colorless, blue and violet ones should be entirely discarded.

NON-CORROSIVE LEAD.—The most practicable method of protecting lead from corrosion is to take sixteen grams of solid caustic soda, dissolve it in 1.75 liters of water, and add to the liquid seventeen grains of nitrate of lead, or an equivalent of other lead salt, with two hundred and fifty cubic centimeters of water, raising the temperature of the mixture to ninety degrees C. If sufficient lead salt has been added, the liquid will remain somewhat turbid after heating, and is then to be rapidly strained or filtered through asbestos, or other suitable material, into a convenient vessel. The filtered liquid is then well mixed with one hundred cubic centimeters of hot water, containing in solution four grams of sulpho-urea thiocarbimide. If the temperature of the mixture be maintained at about seventy degrees C., deposition of sulphide of lead or galena, in the form of a fine adherent film or layer, quickly takes place on any object immersed in or covered with the liquid, provided the object be in a perfectly clean state and suitable for the purpose. A layer of galena is thus obtained which is so strongly adherent that it can be easily polished by means of the usual leather polisher.

ORGANIC IMPURITIES IN WATER.—A very simple and important test for determining the quality of drinking water, and especially as to its freedom from sewage contamination, is given in *The Pharmaceutical Journal*. This consists in placing a few grains of the best white lump sugar in half a pint of the water in a perfectly clean, colorless glass-stoppered bottle, freely exposed to daylight in the window of a warm room. If the water be perfectly free from sewage contamination, it should not become turbid, even after an exposure of a week or ten days, in which case it is almost certainly safe, otherwise not.